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CLAIMS:

1. An implant clamp for clamping an implant having a base to a bone, said clamp including a support member, means for coupling the support member to a bone, an arm
5 pivotally connected to the support member, and an actuating member which is operable to cause rotation of the arm relative to the support member whereby the arm exerts a force on the implant which is substantially perpendicular to the base of the implant.
2. An implant clamp as claimed in claim 1 wherein the actuating member comprises a
10 manually operable screw acting between the arm and the support member.
3. An implant clamp as claimed in claim 2 wherein the support means is generally in the form of a plate.
- 15 4. An implant clamp as claimed in claim 3 wherein the means for coupling includes one or more removable pins which pass through bores in the support member.
5. An implant clamp as claimed in claim 4 wherein a number of bores are provided through the plate so that a plurality of said pins can be used to securely connect the support
20 member to a bone.
6. An implant clamp as claimed in claim 3 wherein the plate includes a slot and wherein said arm extends transversely through the slot and wherein the arm is pivotally connected to the plate by means of a removable shaft which is received within aligned
25 bores in the plate so that the arm functions as a lever.
7. An implant clamp as claimed in claim 6 wherein the screw passes through a threaded bore in one end of the arm, one end of the screw being engagable with a block which projects from the plate.

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8. An implant clamp as claimed in claim 7 wherein the other end of the screw is provided with a head for manually rotating the screw.
9. An implant clamp as claimed in claim 7 or 8 wherein an implant engaging member
5 is mounted on the other end of the arm for engaging, in use, the implant.
10. An implant clamp as claimed in claim 9 wherein the implant engaging member is pivotally connected to the other end of the arm for limited rotation about an axis which is parallel with said shaft.
- 10 11. An implant clamp as claimed in claim 10 wherein the implant engaging member includes a part cylindrical surface.
12. An implant clamp as claimed in claim 11 including a mounting plate from which
15 the part cylindrical surface extends.
13. An implant clamp as claimed in claim 12 wherein said other end of the arm includes a slot and said mounting plate is located in the slot.
- 20 14. An implant clamp as claimed in claim 11, 12 or 13 wherein the diameter of said part cylindrical surface is about 20mm.
15. An implant clamp as claimed in claim 11, 12, 13 or 14 wherein the length of said part cylindrical surface is about 50mm.
- 25 16. An implant clamp as claimed in any one of claims 6 to 15 wherein the plate has a plurality of aligned bores so that the shaft can be selectively placed through the bores to thereby adjust the position of the arm relative to the plate.
- 30 17. An implant clamp as claimed in claim 16 wherein the arm includes a plurality of holes through which the shaft may selectively pass to thereby effectively vary the lever

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ratio of said arm.

18. An implant clamp as claimed in claim 17 wherein there are three of bores in the plate and three of the holes in the arm.

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19. An implant clamp as claimed in claim 17 or 18 wherein the lever ratio of said arm is variable in the range from about 1.5 to 7.

20. An implant clamp as claimed in claim 19 wherein the lever ratio of said arm is 1.8,
10 3.1 or 6.4.

21. An implant clamp as claimed in any one of claims 1 to 20 adapted for use in total knee replacement surgery and wherein said bone is the tibia of a patient.

15 22. A method of fixing an implant to a bone comprising the steps of preparing a surface of the bone for receipt of an implant, coupling a clamping member to the bone adjacent to said surface, applying implant cement between the surface and the implant, actuating the clamping member so that the implant is forced into engagement with the cement on the surface by means of an engagement member which asserts a force on the implant
20 substantially solely in a direction which is perpendicular to said surface of the bone.

23. A method as claimed in claim 22 wherein the clamping member comprises an implant clamp as claimed in any one of claims 1 to 20.

25 24. A method as claimed in claim 23 wherein the implant is a knee prosthesis and the bone is the tibia of a patient.

25. An implant clamp for clamping an implant to a bone, the clamp including:
a support member;
30 connecting means for connecting the support member to the bone adjacent to a site where the implant is to be mounted;

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an arm;

adjustable pivot means for forming a pivotal connection between the arm and the support member about one or more selectable pivot axes; and

an actuating member which is operable to cause rotation of the arm relative to the support member whereby the arm exerts a force on the implant at a location thereon which depends on which of the selectable pivot axes is selected.

26. An implant clamp as claimed in claim 27 wherein the adjustable pivot means includes a pivot shaft, first spaced pivot holes in the support member and second spaced pivot holes in the arm, the arrangement being such that one of the selectable pivot axes can be selected by aligning one of the first pivot holes with one of the second holes and passing the pivot shaft through said aligned holes.

27. An implant clamp for clamping an implant to a bone, the clamp including:
a support member having a plurality of connecting holes therethrough;
mounting pins which can pass through the connecting holes to penetrate the bone for mounting the support member adjacent to a site where the implant is to be mounted;
an arm pivotally connected to the support member; and
an actuating member which is operable to cause rotation of the arm relative to the support member whereby the arm exerts pressure on an implant in order to force the implant into firm contact with the bone at said site.